

REMARKS

Claims 10-32 are now present in this application, with claims 1-9 being canceled without prejudice or disclaimer of the subject matter contained therein (wherein Applicants respectfully reserve the right to file a Divisional application on the subject matter of these claims), and with new claims 16-32 being added by the present Amendment.

PRIOR ART REJECTION

The Examiner has rejected claims 10 and 12-15 under 35 U.S.C. § 102(b) as being anticipated by Tsukasaki et al. This rejection is respectfully traversed.

Tsukasaki et al.

The Tsukasaki et al. reference is directed to a parts mounting sequence determination method and apparatus. Such a method determines a mounting sequence of various parts so that the parts are sequentially mounted on a board by a rotatable mounter.

CLAIM AMENDMENTS

Each of independent claims 10 and 15 of the present application have been amended to clarify the distinctions between the present application and the Tsukasaki et al. reference. Each of claims 10 and 15 have been amended to clarify that the mounting process data utilized in the automatic component mounting unit of claim 10 and in the system of claim 15, is data related to a fixed reference mark. By using such data measured relative to a fixed reference, for example, the data can be utilized for readily calibrating one or more of the automatic component mounting members virtually upon immediately installation. In this way, the time consuming calibration step subsequent to installation can be effectively eliminated - see last paragraph of page 3 of the present application for example.

DISTINCTIONS OVER TSUKASAKI ET AL.

The Tsukasaki et al. reference fails to teach or suggest at least “mounting process data related to a fixed reference mark” as set forth in each of independent claims 10 and 15 of the present application. The Tsukasaki et al. reference is not related to limiting calibration time, and is instead just generally related to a device which determines a particular mounting sequence. As such, each of independent claims 10 and 15 distinguish from The Tsukasaki et al. reference.

DEPENDANT CLAIMS AND NEW CLAIMS

With regard to the various dependent claims of the present application, each of these claims clearly distinguish over the Tsukasaki et al. reference for at least the reasons previously suggested regarding their corresponding independent claims. With regard to various new claims, these claims further clarify distinctions over the Tsukasaki et al. reference. For example, with regard to claim 16, this claim states that the mounting process includes one of geometrical and positioning data measured relative to a fixed reference mark, which is clearly not taught or suggested by the Tsukasaki et al. reference. Similarly, claims 11 and 25 relate to a transponder, which is admittedly not shown in the Tsukasaki et al. reference. With regard to the new independent claim 22, this claim is allowable in that it includes “mounting process data related to a fixed reference mark” which is clearly not taught or suggested by the Tsukasaki et al. reference. Similar arguments apply to other newly added claims.

OBVIOUSNESS REJECTION

Finally, the Examiner rejects claim 11 under 35 U.S.C. § 103 as being unpatentable over the Tsukasaki et al. reference in view of Asai et al. This rejection is respectfully traversed.

With regard to Asai et al., even assuming *arguendo* that it could be combined with the Tsukasaki et al. reference, which Applicants do not admit, Asai et al. would still fail to make up for at least the previously mentioned deficiencies of the Tsukasaki et al. reference. Accordingly, for at least the reasons previously presented, each of independent claims 10, 15 and 22 is allowable over the alleged combination of the Tsukasaki et al. reference and Asai et al. reference, even assuming *arguendo* that they could be combined.

In addition, Applicants respectfully submit that it would not be obvious to one in ordinary skill in the art to combine the teachings of Asai et al. with those of Tsukasaki et al. The transmitting device 316 of Asai et al. is just that, a transmitting device, and it is not a storage device which includes a transponder or transponder unit as claimed in claims 11 and 25 of the present application. Accordingly, even assuming *arguendo* that the Asai et al. reference and the Tsukasaki et al. reference could be combined, each of claims 11 and 25 of the present application would be allowable over the alleged combination of references.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 10-32 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

Application No. 09/559,886
Docket No. 32860-000241/US

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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MARKED-UP VERSION OF CLAIMS

10. (Amended) An automatic component mounting unit for mounting an electrical component onto a substrate of an electrical assembly, comprising:

a plurality of mounting members disposed for mounting said electrical component, each of said mounting members including a respective data storage device, wherein each of said data storage devices stores an amount of mounting process data related to a fixed reference mark, for [of] each of said respective mounting members; and

a control device disposed for controlling said automatic component mounting unit, each of said data storage devices transmitting said amount of mounting process data to said control device, wherein said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component.

15. (Amended) A system for operating an automatic component mounting unit for mounting an electrical component onto a substrate of an electrical assembly, comprising:

a plurality of mounting members installed for mounting said electrical component, wherein each of said members includes a respective data storage device for storing an amount of process data[,]
related to a fixed reference mark; and

a control device disposed for communicating with each of said data storage devices for processing said amount of process data, wherein said control device utilizes said amount of process data so as to readily adapt each of said mounting members for optimal use upon installation of each of said mounting members to said automatic component mounting unit.